DOCUMENT RESUME

ED 095 187 SP 008 368

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TITLE Relationships of Self-Concept and Teaching Behaviors of Secondary Teacher Candidates in Microteaching.
PUB DATE 16 Apr 74
NOTE 12p.; Paper presented at the Annual Meeting of the American Educational Research Association (59th, Chicago, Illinois, April 1974)

EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS Educational Research; Measurement; Measurement Techniques; *Microteaching; *Self Concept; *Student Teachers; Teacher Behavior; Teacher Education; Teachers

ABSTRACT

Self-concepts of teachers and student teachers have been found to predict certain specific teaching behaviors. This study explored these possible relationships in the microteaching setting. Self-Report Inventory and OScAR measures were obtained on 51 students, all secondary teacher candidates. Correctional and ANOVA procedures yielded only a few significant results. The inadequacy of self-concept measures to relate significantly to microteaching performance is clearly revealed. Explanations of these findings are set in the context of both self-concept theory and teacher education program development and research. Tables are presented as appendixes. (Authors)

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ED 095187

Relationships of Self-Concept and Teaching Behaviors of Secondary Teacher Candidates in Microteaching

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The importance of an individual's perceptions of himself, significant others, and his environment to his behavior has received substantial documentation (e.g. Combs and Snygg, 1959; Hamachek, 1972; Wylie, 1961). The popular appeal of self-concept theory in contemporary teacher education is manifest in a variety of ways, including substantive study within courses, development of programmatic sequences consistent with personal concerns (Fuller, 1969), and incorporation into comprehensive testing, assessment, and counseling programs (Veldman, 1962). Such developments seem to have been based on at least two major assumptions: 1) that a teacher candidate's self-concept is an appropriate target for modification during his preparation and 2) that a teacher candidate's self-concept may be viewed as an important, even powerful predicator of teaching behavior.

Most research about the self-concept relating to teacher candidates may be grouped with relative ease, into three main categories. One concerns the relationship of teachers' self-concept and generalized success in teaching. Pupils of teachers whose self-concept is higher (possess feelings of positive self-worth) demonstrate higher academic achievement than pupils whose teachers' self-concepts are lower or less adequate (e.g. Sears and Hilgard, 1964; Hamachek, 1972; Staines, 1958). Such findings buttress sentiment that teachers' self-

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1. Paper prepared for delivery at the American Educational Research Association convention, Chicago, Illinois, April 16, 1974.

2. Authors acknowledge with appreciation of assistance given them by John Craghead and Mary Walker.

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concept is importantly related to pupil learning. Additionally, positive self-esteem and a sense of personal adequacy held by teachers and candidates have been related to generalized success in teaching (e.g., Garvey, 1970; Hatfield, 1971). This body of research supports the current emphasis on relevance of candidates' self-concepts in teacher education programs. A second large cluster of studies has focused on the nature of candidates' self-concept among other personality variables (e.g. Bown and others, 1967; Davis and Yamamoto, 1968). Related research has studied the change of self-concept during teacher preparation. Contradictory evidence abounds (e.g. Barden, 1973; Dumas, 1969; Walberg, 1968).

Considerably less research attention has been directed to a third and an ostensibly more fruitful area, the relationship of self-concept measures to observable teacher behaviors. Bowers' and Sears' pioneering study (1961) demonstrated impressively the impact of personality factors on teachers' classroom behavior as a function of a special in-service intervention program. Later, Bowers and associates (1962) noted the predictive power of self-concept measures to specific teaching behaviors in an intern teaching situation. For the most part, research relating self-concept to teacher candidates' teaching behaviors has been conducted in the student teaching or internship setting.

Particularly in the past few years, new settings and conditions for teacher preparation have been developed. Of these, microteaching (Allen and Ryan, 1969) and its variants, including the Teaching Laboratory (Davis and Gregory, 1970), may well have become the most widely adopted. This kind of setting for practice has been found useful in modifying teaching behaviors (e.g., Davis and Smoot, 1970). Apparently, only one study has investigated the role of candidates' self-concept on their teaching behaviors in a microteaching environment. Austad

(1972) found that personality measures, including self reports, were of little usefulness in predicting laboratory teaching behaviors. This study employed primarily high inference estimates (ratings) of teaching behavior, although measures of teaching performance using Flanders' system were also analyzed.

The present study was designed to examine some relationships of self-concept to specific low-inference verbal teaching behaviors exhibited by secondary teacher candidates in a teaching laboratory. Further, the present study continues a series of investigations into the usefulness of the teaching laboratory initiated during the past decade (e.g., Smoot, 1968; Gregory, 1969; Hoover, 1970).

Procedure

Subjects in this study were 51 beginning teacher candidates enrolled in two sections of the introductory course in secondary school teaching at The University of Texas at Austin during the Spring semester, 1973. Of these mainly junior and senior candidates, 31 were female and 20 were male. Both sections taught eight teaching laboratory lessons (Davis and associates, 1970).

Self-concepts were assessed by the Self-Report Inventory (SRI) (Bown, 1961). This 48-item inventory has demonstrated high reliability and validity (Bown, 1967) and yields eight factorially independent scales: self, others, children, authority, work, reality, parents, and hope. Two other measures are derived from the SRI, a total self-concept score and a self-other ratio.

Two ten-minute laboratory lessons for each subject were audio recorded. These lessons focused on the teaching laboratory task of questioning. Candidates' lessons were coded, using the OScAR 5V (Medley and others, 1968). The OScAR 5V yields measures of eleven specific teaching behaviors (e.g. convergent

questions, considering-supporting, pupil response). Scores for these measures were computed as proportions of total behavior observed. Subsequently, six ratio scores were derived (Smoot, 1968).

Obtained data were treated by correlational and analysis of variance procedures employing the LDSTAT-V computer programs (Veldman, 1971) on the CDC 6600 computer at The University of Texas at Austin.

Results

For all Ss, as well as for male and female candidates separately, SRI scores were found to be linearly related to OScAR measures in all but a few cases. However, few statistically significant correlations were observed. Of 170 possible relationships for each group of Ss, only 11 were significant for total Ss, five for males, and seven for females. These significant correlations are displayed in Table 1.

Three sets of ANOVAs, with total SRI scores and self-other ratios as predictor variables, yielded few significant differences. These significant main effect contrasts are summarized in Tables 2-4. Fewer differences as functions of self-concept were observed than differences due to the sex of candidates. Only two interactions were found significant in 51 analyses. These numbers of significant differences were themselves non-significant (Sakoda, Cohen, and Beall, 1954).

Discussion

Measures of self-concept apparently have little, if any, usefulness in predicting teacher candidates' performances in microteaching settings. Results of this study confirm earlier findings about the relation of self-concept measures to teaching behavior in microteaching (Austad, 1970) and relate clearly to the general body of research of this matter (Getzels and Jackson, 1963). The available evidence seems simply not to support the practical use of self-concept

measures in screening candidates for initial involvement in teacher training programs. Inclusion of self-concept measures in teacher education admission batteries probably should be based on other possible uses, such as counseling.

The inadequacy of self-concept measures to predict teaching laboratory (microteaching) behaviors may be explained in part by the ambiguities in self-concept measures (e.g., Wylie, 1968). Another viable explanation has to do with the probable high influence and restriction of the teaching laboratory (microteaching) situation. The demands of both limited time and pedagogic task in this setting may very well not permit the range of behaviors reflecting the candidates' self concept. Also, conceptualization of self-concept as a general construct may inhibit present research inquiries in teacher education settings. Global personality trait dispositions, such as the self-concept, have been found to be inconsistent predictors of behavior in specific situations (Mischell, 1973). Consequently, reconceptualization of the self-concept to include specific attention to self-concept in situational terms could very well advance theory, empirical study, and practice.

Table 1

Statistically Significant Correlations Between
SRI and OScAR Measures

SRI Scale	OScAR Scale	Correlations		
		Total(N=51)	Male (N=20)	Female (N=31)
Self	Convergent	.2776*		
	Considering-Supporting	.2913*		.3626*
Other	Considering-Supporting	.4265**		.5082**
Children	Divergent	.2868*		
	Divergent/Convergent		-.5459	
Authority	Divergent		.4983*	
Reality	Divergent	.2775*		
	Divergent/Convergent		-.5276*	
	Considering-Supporting	.4175**		.5879**
Parents	Eliciting 2	.3751**		.4351*
	Divergent	.3387		
	Considering-Supporting			.4238*
	Eliciting 1			-.3915*
Total	Eliciting 2	.2895		
	Considering-Supporting	.3891**		.4006*
	Divergent		.4797*	
	Divergent/Convergent		-.5065*	
Self/Other	Pupil Response	-.3599**		

* $p \leq .05$
** $p \leq .01$

Table 2

Summary of Significant Main Effect Contrasts from
2(M-F) X 2 (Hi-Lo Total SRI) ANOVAs on 17 OScAR Variables

OScAR Measure	Means		F	p
	Male	Female		
Eliciting 1	.0360	.0593	6.6172	.0128
Informing	.7201	.6183	8.1413	.0065
Solicitation	.1220	.1559	4.0679	.0467
Solicitation/Inform	.2454	.3513	4.8103	.0313
Indirect/Direct	.1877	.2493	6.82 5	.0116
Probing Ratio	.0699	.1040	6.9287	.0111

Table 3

Summary of Significant Main Effect Contrasts from
2(M-F) X 2 (upper-lower Third Total SRI)
ANOVAs on 17 OScAR Variables

OScAR Measure	Means				Means			
	Male (N=10)	Female (N=25)	F	p	Upper 1/3 (N=17	Lower 1/3 N=18	F	p
Eliciting 1	.0331	.0621	4.8260	.0336	.0361	.0591	3.0306	.08
Eliciting 2					.0524	.0310	3.8377	.05
Divergent Q					.0472	.0279	3.8155	.05
Considering-Supporting					.0314	.0134	6.5656	.01

Table 4

Summary of Significant Main Effect Contrasts from
2(M-F) x 2 (Hi-Lo Self/Other Ratio)
ANOVAs on 17 OScAR Variables

OScAR Measure	Means		F	p	Means		F	p
	Male	Female			Hi S/O	Lo S/O		
Pupil Response					.0103	.0391	5.4001	.0231
Problem Structuring Statement	.0431	.0580	3.2462	.0745				
Elicitation 1	.0375	.0568	3.9237	.0506				
Informing	.7081	.6144	6.9254	.0111				
Indirect/Direct	.1882	.2698	5.1730	.0259				

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